

Larry Hogan, Governor · Boyd K. Rutherford, Lt. Governor · Robert R. Neall, Secretary

January 12, 2018

Public Health Preparedness and Situational Awareness Report: #2018:01 Reporting for the week ending 01/06/18 (MMWR Week #01)

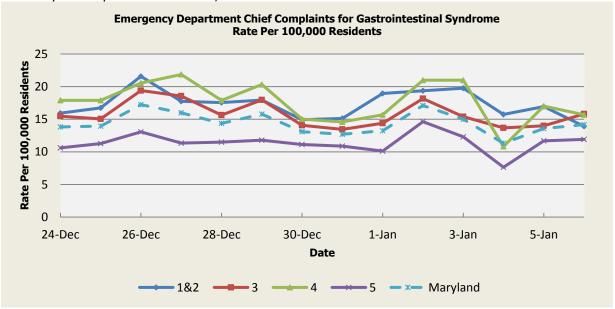
CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

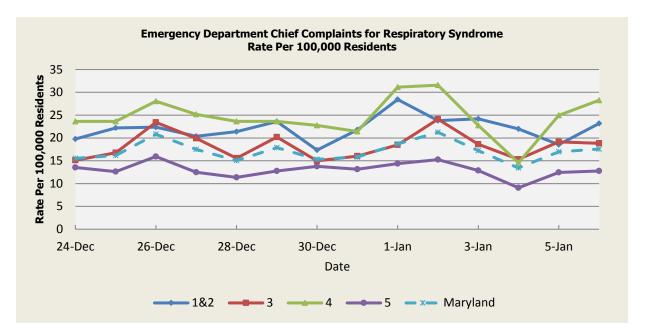
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based **Epidemics**): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2018.



There were seven (7) Gastrointestinal Syndrome outbreaks reported this week: four (4) outbreaks of Gastroenteritis in Nursing Homes (Regions 3,5); three (3) outbreaks of Gastroenteritis in Assisted Living Facilities (Regions 3,4,5).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present										
Health Region	1&2	1&2 3 4 5 Maryland									
Mean Rate*	12.77	12.77 14.89 15.30 1.01 1.29									
Median Rate*	12.91 14.80 15.02 10.22 12.95										

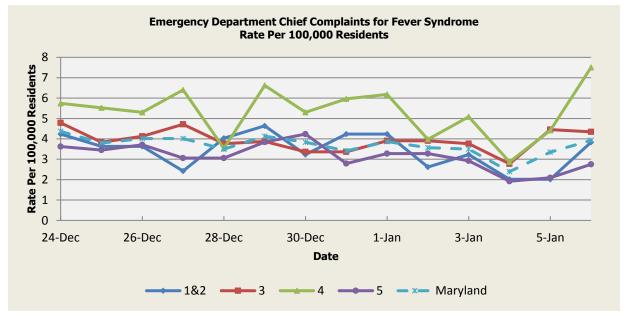
^{*} Per 100,000 Residents



There were seven (7) Respiratory illness outbreaks reported this week: four (4) outbreaks of Influenza in Nursing Homes (Regions 1&2,3,4,5); one (1) outbreak of Influenza/Pneumonia in a Residential Treatment Program (Regions 1&2); one (1) outbreak of ILI associated with a Daycare Center (Region 3); one (1) outbreak of ILI/Pneumonia in a Nursing Home (Regions 1&2).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present								
Health Region	182 3 4 5 Maryland								
Mean Rate*	11.93	12.33							
Median Rate*	11.70 13.88 13.91 9.65 12.05								

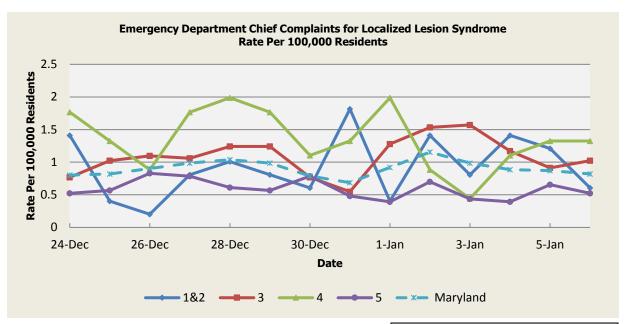
* Per 100,000 Residents



There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Marylar								
Mean Rate*	2.95	3.80	3.91	3.00	3.43				
Median Rate*	2.82	3.40							

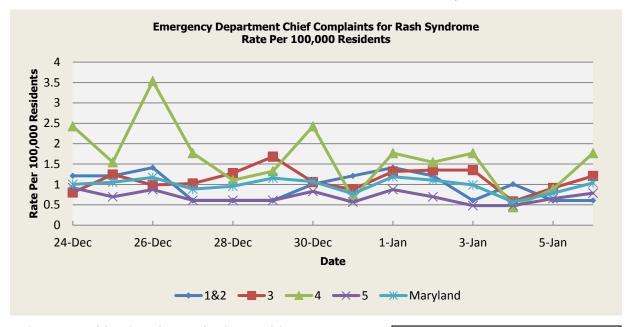
Per 100,000 Residents



There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	Maryland						
Mean Rate*	1.04	1.86	2.01	0.94	1.45			
Median Rate*	1.01	1.83	1.99	0.92	1.42			

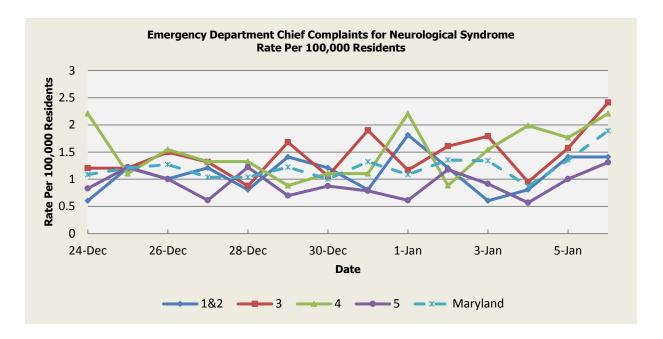
^{*} Per 100,000 Residents



There was one (1) Rash Syndrome outbreak reported this week: one (1) outbreak of Chickenpox in a Dance School (Region 5).

	Rash Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	1.21	1.72	1.01	1.41					
Median Rate*	1.21 1.68 1.77 1.00 1.39								

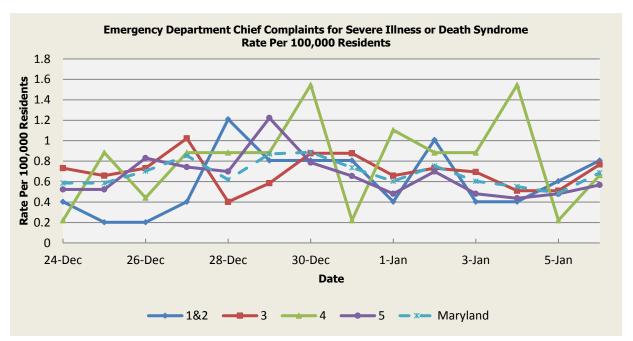
^{*} Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Marylar							
Mean Rate*	0.68 0.83 0.73 0.53 0.69							
Median Rate*	0.60 0.69 0.66 0.48 0.59							

* Per 100,000 Residents

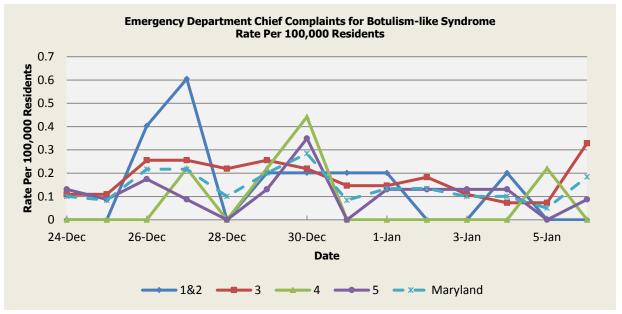


There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2	3	4	5	Maryland				
Mean Rate*	0.62	0.89	0.79	0.46	0.69				
Median Rate*	0.60 0.91 0.66 0.44 0.70								

^{*} Per 100,000 Residents

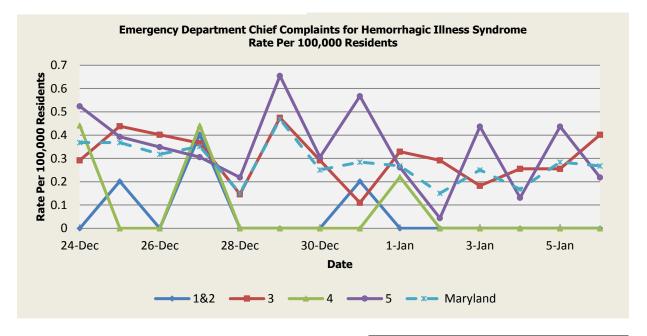
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 12/24 (Region 5), 12/26 (Regions 1&2,3,5), 12/27 (Regions 1&2,3,4), 12/28 (Region 3), 12/29 (Regions 1&2,3,4,5), 12/30 (Regions 1&2,3,4,5), 12/31 (Regions 1&2), 01/01 (Regions 1&2,5), 01/02 (Region 5), 01/03 (Region 5), 01/04 (Regions 1&2,5), 01/05 (Regions 4,5), 01/06 (Region 3). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present									
Health Region	1&2 3 4 5 Marylar									
Mean Rate*	0.07	0.10	0.05	0.06	0.08					
Median Rate*	0.00	0.00 0.07 0.00 0.04 0.05								

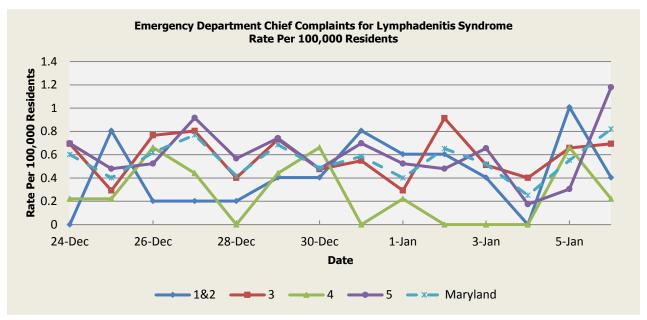
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 12/24 (Regions 3,4,5), 12/25 (Regions 1&2,3,5), 12/26 (Regions 3,5), 12/27 (Regions 1&2,3,4,5), 12/28 (Region 5), 12/29 (Regions 3,5), 12/30 (Regions 3,5), 12/31 (Regions 1&2,5), 01/01 (Regions 3,4,5), 01/02 (Region 3), 01/03 (Region 5), 01/05 (Region 5), 01/06 (Region 3). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2	3	4	5	Maryland				
Mean Rate*	0.03	.03 0.13 0.03		0.10	0.10				
Median Rate*	0.00	0.04	0.00	0.04	0.05				

^{*} Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 12/24 (Region 5), 12/25 (Regions 1&2), 12/27 (Region 5), 12/29 (Region 5), 12/31 (Region 5), 01/01 (Regions 1&2), 01/06 (Region 5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	0.31 0.54 0.35 0.33 0.4								
Median Rate*	0.20 0.40 0.22 0.26 0.33								

^{*} Per 100,000 Residents

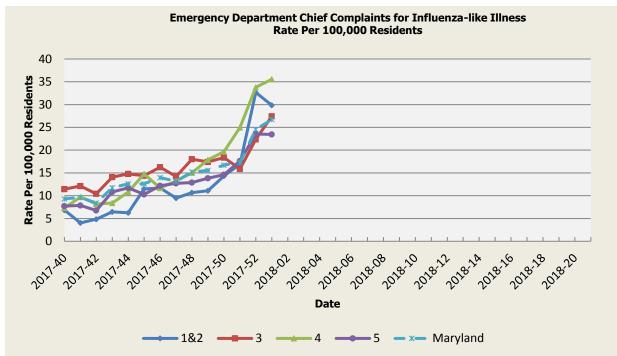
MARYLAND REPORTABLE DISEASE SURVEILLANCE

	Counts of Reported Cases‡							
Condition		tive (Year to	Date)**					
Vaccine-Preventable Diseases	2018 Mean* Median*		2018	Mean*	Median*			
Meningococcal disease	1	0.4	0	1	0.4	0		
Measles	0	0	0	0	0	0		
Mumps	0	1	0	0	1	0		
Rubella	0	0	0	0	0	0		
Pertussis	5	8.8	10	5	8.8	10		
Foodborne Diseases	2018	Mean*	Median*	2018	Mean*	Median*		
Salmonellosis	6	9.8	10	6	9.8	10		
Shigellosis	1	4	3	1	4	3		
Campylobacteriosis	8	15.2	15	8	15.2	15		
Shiga toxin-producing Escherichia coli (STEC)	4	2.6	2	4	2.6	2		
Listeriosis	0	0	0	0	0	0		
Arboviral Diseases	2018	Mean*	Median*	2018	Mean*	Median*		
West Nile Fever	0	0	0	0	0	0		
Lyme Disease	15	30.2	33	15	30.2	33		
Emerging Infectious Diseases	2018	Mean*	Median*	2018	Mean*	Median*		
Chikungunya	1	0	0	1	0	0		
Dengue Fever	1	0.2	0	1	0.2	0		
Zika Virus***	0	0.6	0	0	0.6	0		
Other	2018	Mean*	Median*	2018	Mean*	Median*		
Legionellosis	4	4.8	4	4	4.8	4		
Aseptic meningitis	1	6.2	6	1	6.2	6		

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2018. ‡ Counts are subject to change *Timeframe of 2011-2017**Includes January through current month. *** As of January 11, 2018, the total Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection for 2017 is 67.

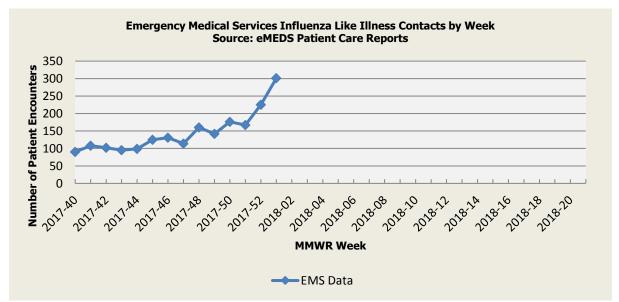
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 01 was: Wide-spread Geographic Spread with Low Intensity.

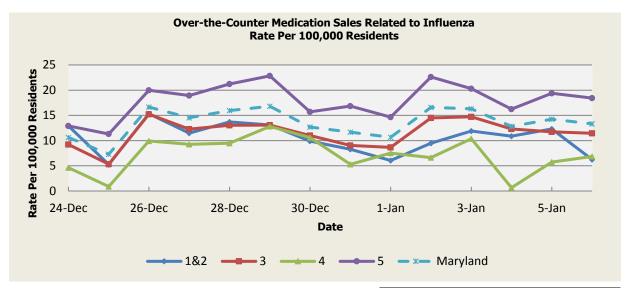


	Influenza-like Illness Baseline Data Week 1 2010 - Present								
Health Region	1&2	3	4	5	Maryland				
Mean Rate*	9.55	12.81	11.76	11.08	11.80				
Median Rate*	7.66	9.63	9.05	8.51	9.00				

* Per 100,000 Residents



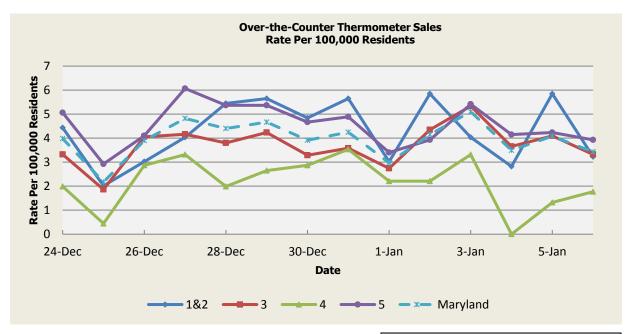
Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.



There was an appreciable increase above baseline in the rate of OTC medication sales on 11/13 (Region 3) during this reporting period. This increase is not known to be associated with any outbreaks.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.66	4.76	2.69	8.17	5.82
Median Rate*	3.23	4.38	2.43	8.03	5.52

* Per 100,000 Residents



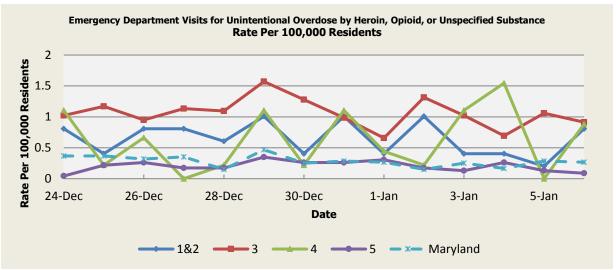
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.18	3.08	2.39	4.07	3.41
Median Rate*	3.02	3.03	2.43	4.06	3.36

^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

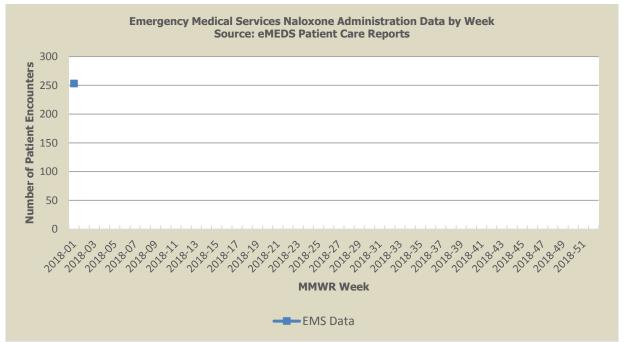
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.



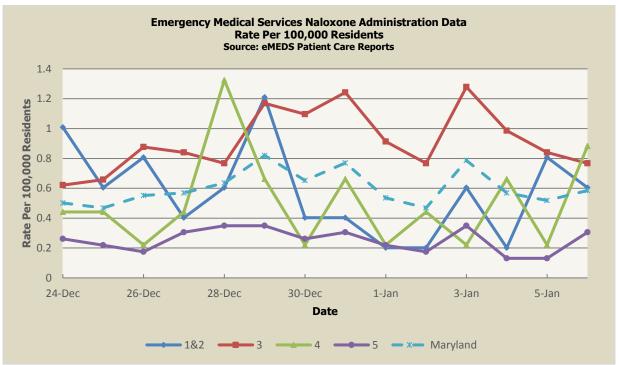
Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

	Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.38	0.34	0.13	0.28
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

	EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.38	0.34	0.13	0.28
Median Rate*	1.01	1.32	1.10	0.48	0.99

^{*} Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of <u>December 07, 2017</u>, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

For Avian Influenza Disease Reports, please visit www.promedmail.org.

HUMAN AVIAN INFLUENZA

For Human Avian Influenza Disease Reports, please visit www.promedmail.org.

NATIONAL DISEASE REPORTS

For National Disease Reports, please visit www.promedmail.org.

INTERNATIONAL DISEASE REPORTS

For International Disease Reports, please visit www.promedmail.org.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

Office of Preparedness and Response, Maryland Department of Health 300 W. Preston Street, Suite 202, Baltimore, MD 21201 Fax: 410-333-5000

Adejare (Jay) Atanda, DDS, MPH, CPH
Biosurveillance Epidemiologist
Jessica Goodell, MPH
Career Epidemiology Field Officer, CDC

Office: 410-767-5668 Office: 410-767-6745

Email: Adejare. Atanda@maryland.gov Email: Jessica. Goodell@maryland.gov

Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
Davisus 1 % 2	Allegany County		
	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Region 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

